

ABSTRACT

5 A rake receiver for high data rate communications systems is provided that is
able to share resources between demodulating branches without using independent
hardware resources for each finger. The rake receiver of the present invention uses
less circuitry while keeping functional equivalence, and it requires relatively smaller
additional area when increasing the number of demodulating branches, thereby having a
significantly smaller size, being able to track more demodulating paths for increasing
performance, and being less complex as compared to conventional rake receivers for
10 high data rate communications systems.